



English Language Arts **STEM** Classroom Grant Equals **SUCCESS**

A little STEAM—science, technology, engineering, math and the arts— was all it took to bring a short story to life in William Mattison’s Language Arts Class at Beehive Science and Technology Academy.

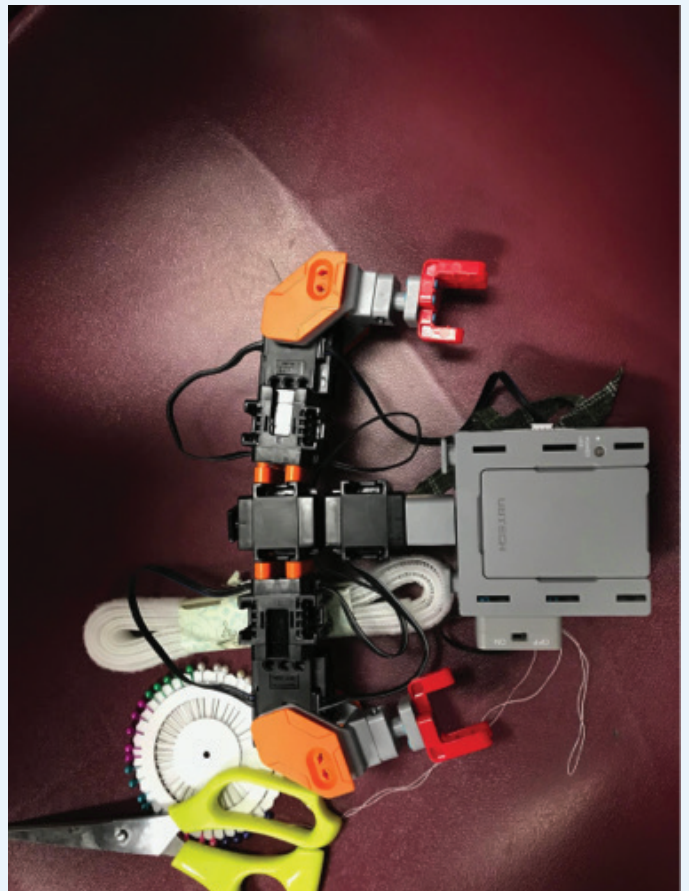
Mattison used video production and its many associated STEM skills to have students create a film version of a short story read in class.

"I'm an English teacher at a STEM school, and have found it very exciting to incorporate technology and digital tools in my classroom," Mattison said.

"I experimented with having my students create a short film, using robots as the characters, based on the literature we read as a class. The students greatly enjoyed programming robots, creating the sets, adapting the script from the literature itself, filming the scenes, and editing the footage, resulting in a product they were very proud of. I found it to be a very successful experiment."



Above: Student making papier-mache character head which will be attached to a robot body



Right: Robot-costume making materials

Characters were made from robots with papier-mache heads, which were then programmed by students to act out their scripted scenes.

Students were involved in writing the script, designing the set, creating hand-sewn costumes for the robot actors after making patterns based on robot measurements, and devising filming techniques to tell the story the way they wanted to. Students even learned a bit of chemistry when one of their sets came apart after mixing wood stain on craft sticks glued to Styrofoam.

A green screen was used for some filming, and stand in shots with lighting and props were used to determine how they wanted different camera shots to look.

Mattison received a classroom grant to provide students with a camera that was able to accommodate their filming needs. The STEM Classroom Grant is available for Utah educators and administrators to apply for funding to improve student understanding of and learning experiences in science, technology, engineering and mathematics (STEM).

Several students in the class mentioned that they were more engaged in their Language Arts class than they had been previously.

One tenth grade student working on robot design and programming said "I finally get to do something I really like and use my interests to make something cool for a class."

Another student, working on a set, said he had been able to apply multiple skills that he had not considered to be useful in an English class. In regards to the wood stain/styrofoam mishaps he said "And we learned a bit of Chemistry too!"

You can learn more about the Utah STEM Classroom Grant by visiting <https://stem.utah.gov/programs/prek12-classroom-grant/>.



Students rebuilding the set floor for the robots to perform.



Learn more about STEM Action Center programs at stem.utah.gov